ENTHONE-OMI SUB OF ASARCO -- ENPLATE NI-415C - PLATING SOLUTION, ELETROLESS NICKEL

MATERIAL SAFETY DATA SHEET

NSN: 6850013151659

Manufacturer's CAGE: 02258 Part No. Indicator: A

Part Number/Trade Name: ENPLATE NI-415C

General Information

Item Name: PLATING SOLUTION, ELETROLESS NICKEL Company's Name: ENTHONE-OMI, INC SUB OF ASARCO

Company's Street: 350 FRONTAGE RD

Company's P. 0. Box: 1900 Company's City: WEST HAVEN

Company's State: CT Company's Country: US Company's Zip Code: 06508

Company's Emerg Ph #: 203-934-8611 (800-424-9300)

Company's Info Ph #: 203-934-8611 Record No. For Safety Entry: 001 Tot Safety Entries This Stk#: 001

Status: SE

Date MSDS Prepared: 290CT90 Safety Data Review Date: 02FEB94

Supply Item Manager: CX

MSDS Preparer's Name: S. A. KOCH

MSDS Serial Number: BHQCD Specification Number: UNKNOWN Spec Type, Grade, Class: UNKNOWN Hazard Characteristic Code: C4

Unit Of Issue: CN

Unit Of Issue Container Qty: 5 GALLONS

Type Of Container: CAN
Net Unit Weight: 51.5 LBS

Ingredients/Identity Information

Proprietary: NO

Ingredient: NICKEL SULFATE (SARA III)

Ingredient Sequence Number: 01

Percent: <20

NIOSH (RTECS) Number: QR9350000

CAS Number: 7786-81-4 OSHA PEL: 1 MG (NI)/M3

ACGIH TLV: 0.1 MG(NI)/M3; 9394

Other Recommended Limit: NONE RECOMMENDED

Proprietary: NO

Ingredient: AMMONIUM HYDROXIDE (SARA III)

Ingredient Sequence Number: 02

Percent: >10

NIOSH (RTECS) Number: BQ9625000

CAS Number: 1336-21-6 OSHA PEL: NOT ESTABLISHED ACGIH TLV: NOT ESTABLISHED

Other Recommended Limit: NONE RECOMMENDED

Proprietary: NO Ingredient: WATER

Ingredient Sequence Number: 03

Percent: >60

NIOSH (RTECS) Number: ZC0110000

CAS Number: 7732-18-5 OSHA PEL: NOT ESTABLISHED ACGIH TLV: NOT ESTABLISHED

Other Recommended Limit: NONE RECOMMENDED

Physical/Chemical Characteristics

Appearance And Odor: BLUE-GREEN LIQUID; SLIGHT AMMONIACAL ODOR

Boiling Point: 212F, 100C Melting Point: 24.0F, -4.4C

Vapor Pressure (MM Hg/70 F): UNKNOWN

Vapor Density (Air=1): UNKNOWN Specific Gravity: 1.235(WATER=1) Decomposition Temperature: UNKNOWN

Evaporation Rate And Ref: N/K (N-BUTYL ACETATE=1)

Solubility In Water: COMPLETE

pH: 8.3

Corrosion Rate (IPY): UNKNOWN

Fire and Explosion Hazard Data

Flash Point: NONE

Extinguishing Media: WATER SPRAY OR FOG, CARBON DIOXIDE, FOAM Special Fire Fighting Proc: WEAR SELF-CONTAINED BREATHING APPARATUS AND FULL PROTECTIVE CLOTHING. KEEP CONTAINERS COOL TO PREVENT RUPTURE AND RELEASE OF MATERIAL.

Unusual Fire And Expl Hazrds: WHEN EXPOSED TO HIGH TEMPERATURES, PRODUCT MAY RELEASE TOXIC OXIDES OF SULFUR AND NITROGEN.

Reactivity Data

Stability: YES

Cond To Avoid (Stability): CONTACT WITH STRONG MINERAL ACIDS. STABLE UNDER NORMAL CONDITIONS.

Materials To Avoid: STRONG MINERAL ACIDS

Hazardous Decomp Products: TOXIC OXIDES OF SULFUR, NITROGEN, AND CARBON.

Hazardous Poly Occur: NO

Conditions To Avoid (Poly): NONE

Health Hazard Data

LD50-LC50 Mixture: ORAL LD50 (RAT) IS UNKNOWN

Route Of Entry - Inhalation: YES

Route Of Entry - Skin: NO

Route Of Entry - Ingestion: NO

Health Haz Acute And Chronic: ACUTE: INHALATION OF VAPOR OR MIST MAY CAUSE RESPIRATORY IRRITATION. CONTACT MAY CAUSE SKIN OR EYE IRRITATION. INGESTION MAY CAUSE IRRITATION OF MUCOUS MEMBRANES OF MOUTH, THROAT, ESOPHAGUS AND GITRACT IRRITATION. CHRONIC: PROLONGED OR RPEATED EXPOSURE MAY CAUSE SKIN SENSITIZATION AND CANCER OF LUNG AND/OR SINUS.

Carcinogenicity - NTP: YES Carcinogenicity - IARC: YES Carcinogenicity - OSHA: NO

Explanation Carcinogenicity: NICKEL AND ITS COMPOUNDS ARE LISTED AS KNOWN CARCINOGENS BY NTP AND IARC.

Signs/Symptoms Of Overexp: INHALED: COUGHING, WHEEZING, SNEEZING, SHORTNESS OF BREATH. EYES: TEARING, BURNING SENSATION, REDNESS, DISCOMFORT. SKIN: REDNESS, SWELLING, BURNING SENSATION, ITCHING. INGESTION: BURNING SENSATION IN MOUTH-THROAT-ESOPHAGUS, STOMACH PAIN, NAUSEA, VOMITING, DIARRHEA

Med Cond Aggravated By Exp: NONE SPECIFIED BY MANUFACTURER. HMIS: PRE-EXISTING SKIN AND RESPIRATORY CONDITIONS.

Emergency/First Aid Proc: INHALED: REMOVE TO FRESH AIR. GIVE ARTIFICIAL RESPIRATION IF BREATHING STOPPED. GIVE OXYGEN IF BREATHING DIFFICULT. SEE DOCTOR. EYES: FLUSH WITH LOTS OF WATER FOR 15 MINUTES, HOLD LIDS OPEN. SEE DOCTOR. SKIN: REMOVE CONTAMINATED CLOTHES. WASH WITH SOAP AND WATER. INGESTED: DO NOT INDUCE VOMITING! GET IMMEDIATE MEDICAL ATTENTION. IF VOMITING OCCURS, KEEP HEAD BELOW KNEES/KEEP AIRWAY OPEN.

Precautions for Safe Handling and Use

Steps If Matl Released/Spill: WEAR PROPER PROTETCIVE CLOTHING. CONTAIN SPILL AND ABSORB WITH INERT MATERIALS,; PLACE IN A CONTAINER FOR ALTER DISPOSAL. DILUTE RESIDUAL MATERIAL WITH WATER AND NEUTRALIZE.

Neutralizing Agent: ACETIC ACID SOLUTION, 5%

Waste Disposal Method: DISPOSE OF IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL REGULATIONS.

Precautions-Handling/Storing: STORE IN A COOL, DRY PLACE ABOVE FREEZING TEMPERATURE. LOOSEN COVER CAUTIOUSLY WHEN OPENING.

Other Precautions: NONE SPECIFIED BY MANUFACTURER.

Control Measures

Respiratory Protection: IF ENGINEERING CONTROLS FAIL OR NON-ROUTINE USE OR EMERGENCY OCCURS; USE NIOSH/MSHA APPROVED RESPIRATOR OR SUPPLIED AIR RESPIRATOR OR SCBA, AS REQUIRED. USE IN ACCORDANCE WITH 29 CFR 1910. 134. Ventilation: USE LOCAL EXHAUST TO MAINTAIN EXPOSURE BELOW PEL/TLV.

Protective Gloves: RUBBER, NEOPRENE

Eye Protection: FACE SHIELD/CHEMICAL SPLASH GOGGLES

Other Protective Equipment: CHEMICALLY RESISTANT COVERALLS, HAT, SOES OR BOOTS. HMIS: EYE WASH STATION & SAFETY SHOWER.

Work Hygienic Practices: WASH HANDS AFTER SUE AND BEFORE EATING, DRINKING, OR SMOKING. LAUNDER CONTAMINATED CLOTHES BEFORE REUSE.

Suppl. Safety & Health Data: DO NOT GET ON SKIN, IN EYES OR ON CLOTHING. DO NOT BREATHE VAPORS OR MISTS. WASH THOROUGHLY AFTER HANDLING.

Transportation Data

Trans Data Review Date: 94033

DOT PSN Code: ZZZ

DOT Proper Shipping Name: NOT REGULATED BY THIS MODE OF TRANSPORTATION

IMO PSN Code: ZZZ

IMO Proper Shipping Name: NOT REGULATED FOR THIS MODE OF TRANSPORTATION

IATA PSN Code: ZZZ

IATA Proper Shipping Name: NOT REGULATED BY THIS MODE OF TRANSPORTATION AFI PSN Code: ZZZ

AFI Prop. Shipping Name: NOT REGULATED BY THIS MODE OF TRANSPORTATION Additional Trans Data: PACKAGE IN A PLASTIC OR GLASS BOTTLE CONFORMING TO PPP-C-186, GROUP A, CLASS 1 OR 2. MANUFACTURER STATES PRODUCT IS NOT

REGUALTED FOR SHIPPING-PHONECON 2/2/94.

Disposal Data

Label Data

Label Required: YES

Technical Review Date: 04FEB94

Label Status: F

Common Name: ENPLATE NI-415C

Chronic Hazard: NO Signal Word: CAUTION!

Acute Health Hazard-Slight: X Contact Hazard-Slight: X

Fire Hazard-None: X

Reactivity Hazard-None: X

Special Hazard Precautions: INHALATION MAY CAUSE RESPIRATORY IRRITATION. CONTACT MAY CAUSE SKIN/EYE IRRITATION. INGESTION MAY CAUSE IRRITATION OF MUCOUS MEMBRANES OF MOUTH, THROAT AND GI TRACT IRRITATION. PROLONGED/REPEATED EXPOSURE MAY CAUSE SKIN SENSITIZATION; CANCER OF LUNG AND/OR SINUS. FIRST AID: INHALED: REMOVE TO FRESH AIR. GIVE ARTIFICIAL RESPIRATION IF BREATHING STOPPED. GIVE OXYGEN IF BREATHING DIFFICULT. SEE DOCTOR. EYES: FLUSH WITH LOTS OF WATER FOR 15 MINUTES, HOLD LIDS OPEN. SEE DOCTOR. SKIN: REMOVE CONTAMINATED CLOTHES. WASH WITH SOAP AND WATER. INGESTED: DO NOT INDUCE VOMITING! GET IMMEDIATE MEDICAL ATTENTION. IF VOMITING OCCURS, KEEP HEAD BELOW KNEES. TARGET ORGANS: LUNGS.

Protect Eye: Y Protect Skin: Y

Protect Respiratory: Y

Label Name: ENTHONE-OMI. INC SUB OF ASARCO

Label Street: 350 FRONTAGE RD

Label P.O. Box: 1900 Label City: WEST HAVEN

Label State: CT

Label Zip Code: 06508 Label Country: US

Label Emergency Number: 203-934-8611 (800-424-9300)

Year Procured: 1994